Title (en)

AMPLITUDE TO PHASE CONVERSION LOGIC USING INTERFERENCE

Title (de)

AMPLITUDEN-PHASENUMWANDLUNGSLOGIK UNTER VERWENDUNG VON INTERFERENZ

Title (fr)

LOGIQUE DE CONVERSION AMPLITUDE/PHASE EMPLOYANT L'INTERFERENCE

Publication

EP 0812444 A4 19990324 (EN)

Application

EP 95943858 A 19951214

Priority

- US 9516457 W 19951214
- US 35746094 A 19941216
- US 41313095 A 19950327

Abstract (en)

[origin: US5466925A] A means, method and apparatus is disclosed for providing at least one phase-modulated output from at least one amplitude-modulated input, which is used to produced the logical AND and OR functions having phase modulated outputs. A constant level bias beam set of at least one wavelength of any wave-type energy is superimposed on at least one modulated input beam set having an energy sum out of phase with the bias beam set at at least one location. Energy in the resulting interference image is separated from said at least one location to produce at least one output. Input levels determine the function performed. When the input energy sum is greater than the bias beam set, the output changes phase. When they are equal, the output is zero, which is also used to produce the NAND function.

IPC 1-7

G06G 7/00; G06E 1/04

IPC 8 full level

G06G 7/00 (2006.01); **G02F 3/00** (2006.01); **G06E 1/00** (2006.01); **G06E 1/04** (2006.01); **G06K 9/74** (2006.01)

CPC (source: EP US)

G02F 3/00 (2013.01 - EP US); **G06V 10/895** (2022.01 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 9618966A1

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